



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,022	04/14/2004	Philip Nathanael Jedele	2448-000012	6013
27572	7590	04/14/2006	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			WILLIAMS, THOMAS J	
			ART UNIT	PAPER NUMBER
			3683	

DATE MAILED: 04/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/824,022	Applicant(s) JEDELE, PHILIP NATHANAEL	
	Examiner Thomas J. Williams	Art Unit 3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 16-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Acknowledgment is made in the receipt of the amendment filed February 23, 2006.

Claim Objections

2. Claims 5 and 11 are objected to because of the following informalities: in line 3 of each claim, the phrase "paid" should be replaced with "pad". Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 2, 4-7, 9-12, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,749,066 to Garrett et al. in view of US 6,173,819 to Meiss et al.

Re-claims 1, 4, 7 and 10, Garrett et al. teach a brake caliper, comprising: a one piece body, the body has a first wall 28/28c, an opposing second wall (interior face of 30), a pair of bridges 26, each bridge is located at a lateral end of the one piece body to connect the first and

Art Unit: 3683

second wall; the first wall includes a bore for receiving a piston assembly; an opening is formed between the first wall, second wall and the pair of bridge sides, the opening spans between the pair of bridge sides forming a continuous opening between the bridge sides such that the bore is accessible through the opening for enabling access into the body; the second wall 30 has a pair of apertures 30e that are continuous with the opening; the caliper assembly further comprises a first and second brake pad 34; grooves 20a formed in the first wall 28 enable a coupling with a knuckle, see column 3 lines 4-13. However, Garrett et al. fail to teach the caliper provided with a pair of bores in the first wall.

Meiss et al. teach a brake caliper capable of having either one bore or a dual bore piston assembly. The dual bore piston assembly results in an increased braking performance, see column 3 lines 28-29. It would have been obvious to one of ordinary skill in the art to have provided the brake caliper assembly of Garrett et al. with two bores for the piston assembly as taught by Meiss et al., thus increasing the braking performance of the brake assembly.

Re-claims 2 and 12, the bridge sides of Garrett et al. as modified by Meiss et al. define a centroid aligned with the centers of the two bores, this will enable tension deflection consistent with the instant invention.

Re-claims 5 and 11, a wall section 30b separates the pair of apertures, wall 30 receives a pad pin 46.

Re-claims 6 and 15, the apertures are U-shaped.

Re-claim 9, groove 20a is interpreted as a bridge side aperture.

Re-claim 14, see figure 1, the pad abutment is above a pad friction center.

Art Unit: 3683

6. Claims 1, 2, 4-7, 9-12 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over US D488,414 to Barbosa et al. in view of Meiss et al.

Re-claims 1, 2, 4-7, 9-12, 14 and 15, Barbosa et al. teach a brake caliper assembly that is substantially identical to the instant invention, and therefore is interpreted as teaching the recited features of the claims. However, Barbosa et al. fail to teach the first wall having two bores for receiving a piston assembly, but rather a single bore.

Meiss et al. teach a brake caliper capable of having either one bore or a dual bore piston assembly. The dual bore piston assembly results in an increased braking performance, see column 3 lines 28-29. It would have been obvious to one of ordinary skill in the art to have provided the brake caliper assembly of Barbosa et al. with two bores for the piston assembly as taught by Meiss et al., thus increasing the braking performance of the brake assembly.

7. Claims 3, 8 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garrett et al. in view of Meiss et al.

Re-claims 3, 8 and 13, Garrett et al. as modified by Meiss et al. fail to specify the desired thickness of the bridge sides as being between 8 mm to 14 mm. It is the opinion of the examiner that the thicknesses of the bridge sections would depend upon the size of the caliper and the intended use of the caliper, such as for a small vehicle or a large vehicle. It would have been obvious to one of ordinary skill in the art as a matter of design choice to have sized the bridge sections of Garrett et al. between 8 mm and 14 mm as warranted by the intended use, and since applicant has not disclosed that having the bridge sections sized between 8 mm and 14 mm solves any stated problem or is for any particular purpose and it appears that the caliper with

Art Unit: 3683

bridge sections between 8 mm and 14 mm thick would have performed equally well in the apparatus of Garrett et al.

8. Claims 3, 8 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barbosa et al. in view of Meiss et al.

Re-claims 3, 8 and 13, Barbosa et al. as modified by Meiss et al. fail to specify the desired thickness of the bridge sides as being between 8 mm to 14 mm. It is the opinion of the examiner that the thicknesses of the bridge sections would depend upon the size of the caliper and the intended use of the caliper, such as for a small vehicle or a large vehicle. It would have been obvious to one of ordinary skill in the art as a matter of design choice to have sized the bridge sections of Barbosa et al. between 8 mm and 14 mm as warranted by the intended use, and since applicant has not disclosed that having the bridge sections sized between 8 mm and 14 mm solves any stated problem or is for any particular purpose and it appears that the caliper with bridge sections between 8 mm and 14 mm thick would have performed equally well in the apparatus of Barbosa et al.

Response to Arguments

9. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 3683

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Thomas Williams whose telephone number is 571-272-7128. The examiner can normally be reached on Monday-Thursday from 6:30 AM to 4:00 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James McClellan, can be reached at 571-272-6786. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-6584.

THOMAS J. WILLIAMS
PRIMARY EXAMINER

TJW

April 13, 2006

Thomas Williams
AV 3683
4-13-06